

Natural Engineer

The Natural Route to Enhanced Maintenance Productivity

Natural Engineer is a versatile code maintenance and reengineering tool that cuts costs and enhances productivity. It helps you to identify accurately the full impact of modifications, and enables you to respond faster to new technological challenges such as the Internet.

THE CHALLENGE:

SIMPLIFY MAINTENANCE

- Managing change
- Lack of skilled personnel
- Full documentation essential

New technology, new business practices, and new legal requirements frequently force enterprises to make modifications to production applications.

The Y2K experience highlighted the considerable cost of major code-modification projects. Lack of complete and accurate documentation compounded the problems and made it impossible to assess the scale of work required. Companies were forced to postpone much-needed new developments in favor of modifying legacy systems. All

this points to a clear need to improve the efficiency of the whole maintenance process and make it easier and cheaper to reengineer production applications.

SOFTWARE AG'S ANSWER:

NATURAL ENGINEER

- Greater transparency
- Enhanced productivity
- Improved responsiveness

Natural Engineer is a versatile maintenance and reengineering tool that cuts costs and enhances productivity. Natural Engineer enables you to respond faster to technological developments such as the Web, while fully leveraging prior investment in Natural applications and in proven business logic.

With Natural Engineer, it is much easier to identify the full impact of changes on existing production systems. The tool makes program structures transparent, and automates many modification tasks. Maintenance and reengineering work becomes much more manageable, allowing developers to focus on mission-critical work, such as new business applications.

Another benefit: Natural Engineer is written in Natural and uses the Adabas DBMS, so it integrates easily into your existing IT environment. This results in lower training costs, lower support costs and faster productive use of the tool.

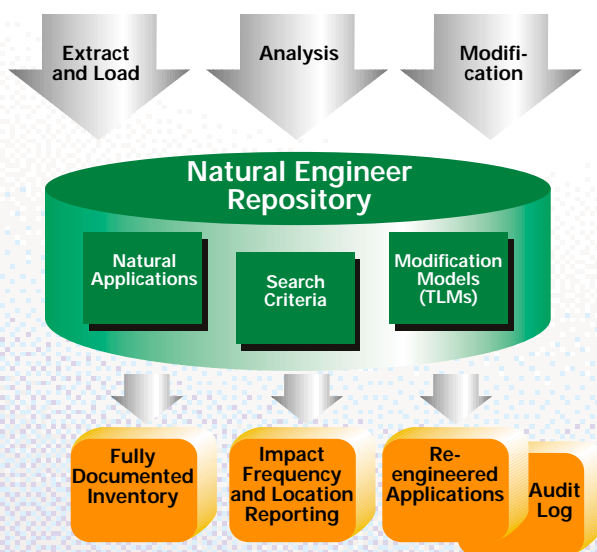
WHAT NATURAL ENGINEER DELIVERS

- Accurate inventory
- Flexible code modification
- Complete audit trail

Natural Engineer features a repository, a search engine, automatic modification facilities and auditing support.

Set-up – reducing complexity

The Extract and Load function retrieves source code from opera-



tional libraries and loads it into the repository. A powerful parser verifies the existence of every object referenced, and identifies redundant and missing objects. This ensures a complete inventory of all application code. Comprehensive reporting facilities cover the entire process.

Benefits

- Gives you an accurate, fully documented description of all current application code.
- Powerful parser adds value to the basic program information stored in the repository, facilitating later impact analysis and modification.
- Full cross-reference data always available online.

Analysis – eliminating uncertainties

The search engine enables you to locate quickly specific fields, files, statement types, etc., and report their frequency and location across all applications. The tool tracks impact chains across program and application boundaries to ensure that all potential impacts resulting from a required change are identified.

Comprehensive impact analysis gives you a complete picture of what needs to be modified. This is essential to allow accurate estimation of the total impact and cost of a proposed change.

Benefits

- The tool gives you a complete picture of all impacts, allowing

you to estimate accurately the scope and cost of modification before you begin.

- Use of a tool eliminates missed impacts: often a problem in complex code modification projects where manual or code scanning techniques are used.

Automatic modification – reducing costs and effort

Natural Engineer makes it easy to apply individual changes and pre-coded solutions automatically. The program modification facilities, including a flexible replace mechanism, are simple to use and increase developer productivity significantly.

All changes made to the program information stored in the repository are logged, with full details of what was changed, by whom and when. This provides a comprehensive audit trail that will meet the requirements of EDP auditors.

Benefits

- This tool-based approach eliminates the need to make repetitive manual changes – a process that can be error-prone.
- Automation reduces implementation time, so scarce development expertise can concentrate on areas requiring a unique, manual solution.
- With the extensive logging feature, you can obtain a full cost history of code modification activity, meeting auditing requirements.

ARCHITECTURE FOR THE FUTURE

Software AG is constantly finding new ways to exploit Natural Engineer's repository of application information.

Building on the basic functionality described here, Natural Engineer provides specific options to fulfill all your Natural program maintenance and re-engineering requirements, including:

- Version migration
- Enhanced documentation
- Performance analysis
- Application re-structuring.

Further options will be added regularly.

TECHNICAL SPECIFICATIONS

Current release level:

Natural Engineer 4.3.1

Minimum Operating Environment:

Mainframe:

Adabas Version 7.1

Natural Version 3.1.4

PC:

Windows NT, 2000 Professional

Natural Version 4.1.2.1

Adabas Version 3.1.1

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